

IN THE CLAIMS

1. **(Previously Presented)** A method of removing pattern resist that remains after an etch of an underlying patterned layer, comprising the steps of:

providing a wafer having an etched patterned layer and an overlying mask pattern resist;

cleaning the wafer with a develop solution;

ashing the surface of the wafer; and

photochemically removing the pattern resist that remains after the cleaning and ashing steps.

2. **(Original)** The method of Claim 1, wherein the wafer is a micromechanical device wafer.

3. **(Original)** The method of Claim 1, wherein the wafer is a DMD wafer.

4. **(Original)** The method of Claim 1, wherein the cleaning step substantially removes polymer residue from the pattern resist.

5. **(Original)** The method of Claim 1, wherein the ashing step substantially removes hardened skin from the pattern resist.

6. **(Original)** The method of Claim 1, wherein the removing step is performed with an acetate strip process.

7. **(Original)** The method of Claim 1, wherein the patterned layer is a metal layer.

8. **(Previously Presented)** A method of forming a patterned layer over a spacer layer on a wafer substrate, comprising the steps of:

depositing the spacer layer;

depositing the material for the patterned layer;

depositing a pattern resist material;

etching the resist material and the material for the patterned layer;
cleaning the resist material and remaining material for the patterned layer with a develop solution after said etching step;
ashing the surface of the wafer after said cleaning step; and
photochemically removing the pattern resist that remains after the cleaning and ashing steps.

9. **(Original)** The method of Claim 8, wherein the wafer is a micromechanical device wafer.

10. **(Original)** The method of Claim 8, wherein the wafer is a DMD wafer.

11. **(Original)** The method of Claim 8, wherein the cleaning step substantially removes polymer residue from the pattern resist.

12. **(Original)** The method of Claim 8, wherein the ashing step substantially removes hardened skin from the pattern resist.

13. **(Original)** The method of Claim 8, wherein the removing step is performed with an acetate strip process.

14. **(Original)** The method of Claim 8, wherein the patterned layer is a metal layer.

15. **(Original)** A method of forming a micromirror array, comprising the steps of:
forming control circuitry on a semiconductor substrate;
depositing a first spacer layer on the substrate;
patterning the first spacer layer to define hinge support vias and spring tip support vias;
depositing a hinge layer over the first spacer layer;
forming at least one hinge etch mask on the hinge layer;

patterning the hinge layer to form at least one hinge, wherein the pattern is formed using a pattern resist layer and an etch process;

removing pattern resist that remains after the preceding step by: cleaning the wafer with a develop solution;

ashing the surface of the wafer; and removing the pattern resist that remains after the cleaning and ashing steps;

depositing a second spacer layer over the hinge layer;

patterning the second spacer layer to define mirror support vias;

depositing a metal mirror layer over the second spacer layer;

patterning the metal mirror layer to form an array of micro mirrors; and

removing the first and the second spacer layers.

16. **(Original)** The method of Claim 15, wherein the cleaning step substantially removes polymer residue from the pattern resist.

17. **(Original)** The method of Claim 15, wherein the ashing step substantially removes hardened skin from the pattern resist.

18. **(Original)** The method of Claim 15, wherein the removing step is performed with an acetate strip process.